

SPECIFICATION AMENDMENTS

Before the paragraph beginning at page 1, line 1, insert as a heading:

Field of the Invention

Replace the paragraph beginning at page 1, line 1 with:

The invention relates to an endless printing sleeve ~~of the multi-layer type~~, which has a printing layer, a compressible layer, and a circumferential stiffening layer.

Before the paragraph beginning at page 1, line 3, insert as a heading:

Background

Before the paragraph beginning at page 1, line 8, insert as a heading:\

Summary of the Invention

Replace the paragraph beginning at page 1, line 8 with:

The invention aims to ~~palliate~~ mitigate these disadvantages.

Replace the paragraph beginning at page 1, line 9 with:

In order to reach this aim, the printing sleeve according to the invention ~~is characterized by the fact that the~~ includes a compressible layer as a radially internal layer of the sleeve, and the a stiffening layer is provided between the a compressible layer and the printing layer.

Before the paragraph beginning at page 1, line 17, insert as a heading:

Brief Description of Drawing Figures

Replace the paragraph beginning at page 1, line 23 with:

- Figure 2 is a view of the radial section of the sleeve according to Figure 1, ~~according to~~ taken along line II-II of Figure 1.

Before the paragraph beginning at page 1, line 25, insert as a heading:

Detailed Description

Replace the paragraph beginning at page 2, line 1, with:

The sleeve thus formed is produced on a tool tube ~~of the type~~ with a cushion of compressed air created by sending compressed air through holes in the peripheral surface of the tube. Different processes which can be used for this purpose are known and can be used in the context of the invention. After the production of the sleeve on the tube, it will be removed from the tube by slipping it off by creation of an air cushion between the internal surface of the sleeve and the external surface of the tube, and it is then fit over the support cylinder of a printing machine. The sleeve can be formed on one tube or on several tubes if required by the manufacturing process. This does not need to be described specifically since it is also part of the state of the art.

Replace the paragraph beginning at page 3, line 21 with:

Reinforcing layer 6, arranged over the compressible layer, is made of a composite material which has, in a thermoplastic or thermosetting polymer matrix, reinforcing elements in the form of fibers or wires helicoidally wound, a knit ~~or~~, weave, or screen, arranged in one or more plies, preferably ~~2~~ two or ~~3~~ three, according to a circular or helicoidal winding. The reinforcing elements are preferably made of carbon, glass, high modulus polyester, or aramide. The reinforcing elements are present in composite layer 6 in a proportion between 20-80 wt% of the composite.

Replace the paragraph beginning at page 3, line 28 with:

The thermoplastic or crosslinkable matrix is present in the layer in a proportion between 80-20 wt% of the composite. ~~In the case of a~~ A thermoplastic matrix of the

~~thermoplastic type, it~~ is made of polyolefin or polyamide, or polyester or a similar material. A hardening or crosslinkable matrix is of the epoxy, polyurethane or acrylate or polyester type or a mixture of polyurethane epoxy with or without acrylate termination, possibly including a plasticizer or flexibility agent and mineral charges. The crosslinking is brought about by temperature, with a hardener, or by radiation with a UV or EB photo-initiator in combination with multifunctional acrylate or methacrylate monomers. The Young's modulus of such a matrix is preferably between 50-1000 MPa.

Replace the paragraph beginning at page 4, line 11 with:

Concerning the properties of reinforcing composite layer 6, it has a thickness preferably between 0.2-0.5 mm and a Young's modulus in the circumferential direction between 400-100,000 MPa, and preferably between 1000-2000 MPa. The elongation at ~~break~~ breakage in the circumferential direction is greater than 1.2% and preferably between 2-4%. The circumferential rigidity combined with the elasticity is necessary both for maintaining the strip of paper which is to be printed and for the register of colors and the immobilization on the cylinder once the sleeve is installed. The Young's modulus in the radial direction is between 50-500 MPa. The Young's modulus in the direction parallel to the axis of the cylinder is preferably greater than 100 MPa in order to facilitate handling of and slipping on of the sleeve. The expert in the field will have understood that composite layer 6 will preferably have very anisotropic mechanical properties.

Replace the paragraph beginning at page 5, line 9 with:

The whole can be produced in two steps or more. In the first case, in the first step, the sleeve is produced, and in the second step, the printing layer is produced. In the second case, all the elements of the sleeve and the printing layer are produced separately. The diameter of the hole, in the state in which it is not slipped on, is 0.1-0.5 mm less than the diameter of the support cylinder.